

1. (Amended) Method of controlling the operation of an approach system of a paper machine, a paper board machine or other web formation apparatus, in which said method comprises the steps of:

- a. forming a pulp from white water, fiber suspension and fillers,  
b. feeding said pulp by a mixing pump into a gas separation tank,  
c. separating gas from said pulp,  
d. feeding reduced gas pulp into a head box of the production machine,

e. changing the feed of the reduced gas pulp to the head box as production changes in the web formation apparatus and the change in the production of the web formation apparatus initiates a regulation system of the approach system, which regulation system essentially simultaneously checks a need for changing an operational mode of the mixing pump, initiates a change of the operational mode of the mixing pump according to said need and both guides and regulates a head box feed pump.

2. (Amended) Method according to claim 1 wherein the regulation system of the approach system controls both a pressure of the head box and a surface level of the gas separation tank.

3. (Amended) Method according to claim 1 wherein an operating point of the feed pump and an operating point of the mixing pump are changed essentially simultaneously.

4. (Amended) Method according to claim 1 wherein an operating point of the mixing pump is changed in anticipation of changing an operating point of the feed pump so that a surface level in the gas separation tank located between said pumps remains essentially constant or changes in a controlled manner.

5. (Amended) Method according to claim 1 wherein a change of head box pressure is readable from the change of an operating point of the head box feed pump, whereby said change of the operating point of the feed pump initiates a control function of the regulation system.

6. (Amended) Method according to claim 2 wherein a surface level of the gas separation tank is controlled by arranging a change of the head box pressure to initiate a control function of the regulation system.

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7. (Amended) Method according to claim 6 wherein the regulation system guides simultaneously the feed pump and the mixing pump so that a pressure in the head box remains constant and a surface level in the gas separation tank remains constant or changes in a controlled manner.

8. (Amended) Method according to claim 6 wherein the regulation system controls the mixing pump anticipatorily in relation to the feed pump so that the head box pressure and the surface level in the gas separation tank remain constant.

9. (Amended) Method according to claim 1 wherein the regulation system changes at least an output of the head box feed pump to keep a pressure in the head box constant, and a surface level variation in the gas separation tank is monitored simultaneously and measurements are taken to correct the surface level of pulp in the gas separation tank.

10. (Amended) Method according to claim 1 wherein a surface level is allowed to change slowly in the gas separation tank temporarily without changing the feed of the gas separation tank.

11. (Amended) Method according to claim 1 wherein when a pressure of the head box changes slowly, the change of the pressure is compensated for only by changing a capacity of the head box feed pump, whereby a surface level of the gas separation tank is allowed to change.

12. (Amended) Method according to claim 1 wherein when a pressure of the head box changes fast, the change of the pressure is compensated for by changing essentially simultaneously a capacity of the head box feed pump and a capacity of the mixing pump.